

What is claimed is:

1. A DC-DC converter circuit comprising:
 - a transformer having a primary winding and a secondary winding, wherein a
5 primary side including the primary winding and a secondary side including the
secondary winding are insulated from each other in the DC-DC converter circuit;
 - a switching circuit including a main switching element which is connected to
the primary winding in series and has a control terminal for controlling the main
switching element, wherein the main switching element is PWM-controlled so as to
10 stabilize an output voltage of the secondary side;
 - a driving circuit for generating PWM driving pulses; and
 - a correction circuit for outputting a voltage whose level is in inverse proportion
to an input voltage of the DC-DC converter circuit,
 - wherein an output of the driving circuit is connected to the control terminal of
15 the main switching element and to the correction circuit.
2. A DC-DC converter circuit as claimed in claim 1, wherein the correction circuit
includes a resistor and a capacitor which are connected in series, and the resistor is
connected to the driving circuit.
- 20 3. A DC-DC converter circuit as claimed in claim 1, further comprising:
 - a state measurement circuit, provided in the primary side, for detecting a state
of the secondary side at the primary side, wherein the state measurement circuit is
connected to the correction circuit.

4. A DC-DC converter circuit as claimed in claim 2, further comprising:
a state measurement circuit, provided in the primary side, for detecting a state of the secondary side at the primary side, wherein the state measurement circuit is connected to the correction circuit.

5

5. A DC-DC converter circuit as claimed in claim 3, wherein:
the transformer has an auxiliary winding provided at the primary side; and
the state measurement circuit is an output voltage measuring circuit for indirectly measuring a smoothed voltage of the auxiliary winding as a voltage level of the output voltage of the secondary side, wherein the smoothed voltage of the auxiliary winding is in proportion to the output voltage of the secondary side.

6. A DC-DC converter circuit as claimed in claim 4, wherein:
the transformer has an auxiliary winding provided at the primary side; and
the state measurement circuit is an output voltage measuring circuit for indirectly measuring a smoothed voltage of the auxiliary winding as a voltage level of the output voltage of the secondary side, wherein the smoothed voltage of the auxiliary winding is in proportion to the output voltage of the secondary side.

7. A DC-DC converter circuit as claimed in claim 3, wherein the state measurement circuit is a current measuring circuit for indirectly measuring an output current of the secondary side by measuring an input current of the primary side.

8. A DC-DC converter circuit as claimed in claim 4, wherein the state measurement circuit is a current measuring circuit for indirectly measuring an output

current of the secondary side by measuring an input current of the primary side.